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45

Hum_PTP1B	1	20	30	40	50	60
Hum_TCPTP	DFPCRVAKLPKNKN	RNRYRDVSPFDHSHRIKLHQE				DN
Hum_PTP_xi_D1	DYHRVAKFPENRN	RNRYRDVSPYDHSRV IQNA				EN
Hum_PTP_zeia_D1	GITADSSNHKPDNKH	KNRYINIVAYDHSRVKLAQL				AEK
Hum_PTP_gamma_D	GITADSSNHKPDNKH	KNRYINIVAYDHSRVKLAQL				AEK
Dros_PTP99A_D1	NITAEHSNHKPDNKH	KNRYINILAYDHSRVKLRPL				PGK
Hum_LCA_D1	DLPCHEHSQHPENKR	KNRYLNITAYDHSRVHLHPT				PGQ
Hum_PTP_mu_D1	QFTWENSNLVKNKP	KNRYANVIAVDHSRVILTSI				DGV
Hum_PTP_alpha_D1	SAPWDSAKKDENRM	KNRYGNIIAYDHSRVRLQTI				EGD
Hum_PTP_opsilon_D	QATCEAASKEENKE	KNRYVNILPYDHSRVHLTPV				EGV
Mouso_CD45_D1	QGFELANKENRE	KNRYPNILPNDHSRVILSQL				DGI
Hum_SH_PTP2	KFPIKDARKPHNQN	KNRYVDILPYDYNRVELSEI				NGD
Hum_SH_PTP1	LYSRKEGQRPENKN	KNRYKNILPFDHTRVVLHDG				DPN
Hum_PTP_bola	LHQRLGQRPENKG	KNRYKNILPFDHSHRVILQGR				DSN
Dros_PTP10D	NQSCDIALLPENRG	KNRYNNILPYDATRVKLSNV				DDD
Hum_SAP.1	DQPCTFADLPCNRP	KNRYTNILPYDHSRFLQPV				HEE
Ral_PTP_STEP	SQSOMVASASENNA	KNRYRNVLPHYDWSRVPLKPI				DPE
Dros_PTP69A_D1	FVDPKEYDIPGLVR	KNRYKTILPNPHSRVRLTSP				NGL
Hum_MEG2	DRTTKNSDLKENAC	KNRYPDIKAYDQTRVKLAVI				SGH
Hum_PTP.PEST	VGTFHCSMSPGNLE	KNRYGDPVCLDQTRVKLTKR				TPS
Hum_PTPH1	IYPTATGEKEENVK	KNRYKDILPFDHSHRVKLTLK				EDY
Dici_PTP1	GLAITFAKLQNLDS	KNRYTNILPVNHTRVQLKKI				QDK
Fiss_yeast_pyp1	PSETSEGDKKHNTS	KNRYTDIVPYNCTRVHLKRT				SPS
Fiss_yeast_pyp2	QWSTVDSLSNTSYK	KNRYTDIVPYDKTRVRLAVP				KGC
Hum_PTP_xi_D2	WCCLASSRSTSISSR					
Hum_LCA_D2	GITADSSNHKPDNKH	KNRYINIVAYDHSRVKLAQL				AEK
Hum_PTP_alpha_D2	TSRFISANLPCNKF	KNRLVNIMPYELTRVCLQPI				RGV
Hum_PTP_opsilon_D2	NDKMRGTGNLPANMK	KNRVLOIIPYEFNRIIPVK				RGE
Mouse_CD45_D2	KENMRGTGNLPANMK	KARVIOIIPYDFNRVILSMK				RGQ
Dros_PTP69A_D2	VEDCSIALLPNHE	KNRCMDILPPDRCLPFLITI				DGE
Hum_PTP_zeia_D2	WRTQHIGNQEEENKK	KNRNSNVVPYDFNRVPLKHELEMSKESEPESESSDDSD				PMR
Hum_PTP_gamma_D2	SKSCSVGENEENNM	KNRSQEIIIPYDRNRVILTPL				SGE
Dros_PTP99A_D2	QSDYSAALKQCENRE	KNRTSSIIIPVERSRVGISSL				PGM
Yarsinia_PTP	VECFSAQKECNKE	KNRNSSVVPSEARAVGLAPL				
PTP1Bseq.no.	ETNLMAEQVEELKNCTPYLEQYKNIIQFOPKDIHIASAMKOVNSIKNRGAIFPIEGSRVHLTPKP					
	TNDPRYLOACGGEKI	LNRFRDIOCCROTAVRAD				
	30	40	50	60		

Fig. 1A

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	70	80	90	100	110	120	130
Hum_PTP1B	DYINASLI	KMEEAQR	SYILLT	QGPLNT	CGHFWEMVWE	QKSRGV	VMLNRVM
Hum_TCPTP	DYINASLV	DIEEAQR	SYILLT	QGPLNT	CCHFWMLVWQ	QKTKAV	VMLNRIV
Hum_PTP_xi_D1	DGKLTdyINANYV	DGYN	RPKAYIAA	QGPLKST	AEDFWRMWE	HNVEVIV	MITNLV
Hum_PTP_ze1a_D1	DGKLTdyINANYV	DGYN	RPKAYIAA	QGPLKST	AEDFWRMWE	HNVEVIV	MITNLV
Hum_PTP_gamma_D	DSKHSdyINANYV	DGYN	KAKAYIAT	QGPLKST	FEDFWRMWE	QNTGII	VMITNLV
Dros_PTP99A_D1	KKNL dyINANFI	DGYQ	KGHAFIGT	QGPLPD	TDFC FWRMIWE	QRTATV	VMMTRLE
Hum_LCA_D1	PGS dyINANYI	DGYR	KONAYIAT	QGPLPET	MGDFWRMWE	QNTATV	VMMTRLE
Hum_PTP_mu_D1	TNS dyINGNYI	DGYH	RPNHYIAT	QGPMQET	IYDFWRMWH	ENTASII	IMVTNLV
Hum_PTP_alpha_D1	PDS dyINASFI	NGYQ	EKNKFIAA	QPKKEET	VNDFWRMIWE	QNTATV	IMVTNLK
Hum_PTP_onsilon_D	PCS dyINASFI	DGYK	EKNKFIAA	QPKKEET	VNDFWRMIWE	QKSATV	IMVTNLK
Mouso_CD45_D1	AGS dyINASYI	DGFK	EPRKYIAA	QPRDET	VDDFWRMWE	QKATVIV	IMVTRCE
Hum_SH.PTP2	EPV SDYINANI	IMPEFET	CKNSK	PKKSYIAT	QGCLQNT	VNDFWRMV	FQ ENSRVIV
Hum_SH.PTP1	IPG SDYINANI	KNQLL	GPDE	NAKTYIAS	QCLEAT	VNDFWQMAWQ	ENSRVIV
Hum_PTP_bola	PCS dyINASYI	PGNN	FRREYIVT	QGPLKST	KDDFWRMWE	QNVHNI	IVMTQCV
Dros_PTP10D	EGS dyINANYV	PGHN	SPREFIVT	QGPLHST	RDDFWRMWE	QNSRAIV	IMVTRCF
Hum_SAP.1	PGS dyINASFM	PGLW	SPQEFIAT	QGPLPQ	TVDGFWRLVWE	QQSHTL	VMLTNCM
Ral_PTP_STEP	DPL SsyINANYI	RGYGEK	VYIATQ	GPISVTV	DFWRMVWQ	ERTPII	VMITNIE
Dros_PTP69A_D1	QTT dyINANFV	IGYK	ERKKFICA	QPMEST	IDDFWRMIWE	QHLFI	IVILTNL
Hum_MEG2	TQT dyINASFM	DGYK	QKNAYIGT	QPLENTY	RDFWLMVWE	QKVLV	IVMTTRFE
Hum_PTP1	QDS dyINANFI	KGvy	GPKAYVAT	QGPLANT	VIDFWRMVWE	YNVVI	IVMACREF
Hum_PTPH1	INA SVVMEI	PAAN	LVNKYIAT	QGPLPHT	CAQFWQVVD	QKLSLI	VMLTTLT
Dici_PTP1	EGS dyINASYI	DGAY	PKQFICTQ	QGPLPNT	IADFWRMVWE	NRCRII	VMLSRES
Fiss_yeast_pyp1	EL dyINASFI	KTETS	NYIACQ	GSISRS	ISDFWHMV	VNDVNI	IGTIVMLGSLF
Fiss_yeast_pyp2	S dyINASHI	DVGNN	KYIACQ	APKPGT	LDDFWEMV	VHNSGT	NGVIVMLTNLY
Hum_PTP_xi_D2	DGKLTdyINANYV	DGYN	RPKAYIAA	QGPLKST	AEDFWRMWE	HNVEVIV	MITNLV
Hum_LCA_D2	EGS dyINASFL	DGYR	QKAYIAT	QGPLAEST	EDFWRMWE	HNSTII	VMLTKLR
Hum_PTP_alpha_D2	ENT dyVNASFI	DGYR	QKDSYIAS	QGPLLHT	IEDFWRMWE	WKSCSI	VMLTELE
Hum_PTP_onsilon_D2	EYT dyVNASFI	DGYR	QKDYFIAT	QGPLAHT	VEDFWRMWE	WKSHTI	VMLTEVQ
Hum_PTP_mu_D2	SS NYINAALM	DSYK	QPSAFIVT	QHPLPNT	VKDFWRLVLD	YHCTS	VMLNDVD
Mouse_CD45_D2	SEETskyINASFV	MSYW	KPENMIAA	QGPLKET	IGDFWQMIFQ	RKVKVI	VMLTEL
Dros_PTP69A_D2	ENS dyINASFI	EGYD	NSETFIIA	QDPFENT	IGDFWRMISE	QSVTTL	VMISEIG
Hum_PTP_zeia_D2	GT dyINASYI	MGYV	QSEFIIIT	QHPLLHT	IKDFWRMIWD	HNAQLV	VMIIPDGO
Hum_PTP_gamma_D2	KGT dyINASYI	MGYV	RSNEFIIT	QHPLPHT	TTKDFWRMIWD	HNAQII	VMLPDNQ
Dros_PTP99A_D2	GEDGSDyINASWL	HGFR	RLRDFIVT	QHMAHTI	IKDFWQMVVD	HNAQT	VLLSSLD
Yarsinia_PTP	NYIOVG	NRTIAC	QYPLQ	SOLES	HFRMLAE	NRTPV	LAVALASSS
PTP1Bseq.no.	70	80	90	100	110	120	130

Fig. 1B

PTP1B66

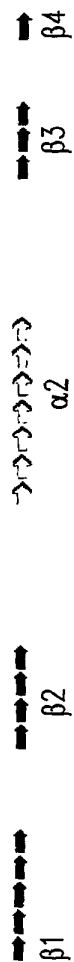


FIG. 90 " 323582.60

Hum_PTP1B	EKGLKCA	QYWPQKEEKEM	IFEDTNLKLTLISEDIKSYTVLELE	140	150	160	170	180	190	200
Hum_TCPTP	EKESVKA	QYWPT DDQEM	LFKETGFSVKLLSESVKSYTVLQLE							NLTQTETREI
Hum_PTP_xi_D1	EKGRRKCD	QYWPP ADGSE	EYGN FLVTQKSVQVLAITYTFLRNTKIKKG							NINSGETRTI
Hum_PTP_zeia_D1	EKGRRKCD	QYWP ADGSE	EYGN FLVTQKSVQVLAITYTFLRNTKIKKG							SQKGRPSGRVV
Hum_PTP_gamma_D	EKGRRKCD	QYWP TENSE	EYGN IIVTLKSTKIHCYTVFSIRNTKVKKGQKGNPKGRQNERVV							SQKGRPSGRVV
Dros_PTP99A_D1	ERGRRKCD	MYWP KDGVE	TYGV IQVKLIEEEVMSTYTVLQIKHLKLLK							KKQCNTTEKLV
Hum_LCA_D1	EKSRVKCD	QYWP ARGTE	TCGL IQVTLIDTVELATYTVFALH							KSGSSEKREL
Hum_PTP_mu_D1	EVGRVKCC	KYWP DDTE	IYKD IKVTLIETELAEYVIFAVE							KRGVHEIREI
Hum_PTP_alpha_D1	ERKECKCA	QYWP DQGCW	TYGN IRVSVEDTVLVDTYVFCIQQVG							DMTNRKQPRLI
Hum_PTP_opsilon_D	ERKECKCH	QYWP DQGCW	TYGN IRVSVEDTVLVDTYVFCIQQVL							PDGCKAPRLV
Mouso_CD45_D1	EGNRNKCA	EYWPMEEGTR	AFKD IIVTINDHKRCPDYIILNVAH							KKEKATGREV
Hum_SH.PTP2	ERGKSKCV	KYWP EYALK	EYGV MRVRNVKESAADHYTLKLSK							VGQGNTERTV
Hum_SH.PTP1	EKGRNKCV	PYWP VGMR	AYGP YSVTNCGEHDTTEYKLLQVSP							LDNGDLIREI
Hum_PTP_bola	EKGRVKCD	HYWPA DQDSL	YYGD LILQMLSESVLPETWIFKICG							EEQLDAHRLI
Dros_PTP10D	EKGREKCD	QYWP DTVPV	FYGD IKVQILNDSHYADWMFMLC							RGSEQRIL
Hum_SAP.1	EAGRVKCE	HYWPL DSQPC	THGH LRVTLVGEEVMENWTVLLLL							QVEEQKTLV
Rai_PTP_STEP	EMN EKCT	EYWP EEQV	VHDG VEITVQKVIHTEDYRLISLR							RGTEERGL
Dros_PTP69A_D1	EYNKAKCA	KYWPKEVFDTK	QFGD ILVKAQERKTDGYIELNVSKNKAN							VGEEEDRRQI
Hum_MEG2	EGRRKCCG	QYWP LEKDSRI	RFGF LVTNLGVENMNHKKLEIH							NTEERQKRQV
Hum_PTP.PEST	EMGRKKCE	RYWPLYGEDPI	TFAP FKISCEDEQARTDYFILLLE							FQNESRRL
Hum_PTPH1	ERGRTKCH	QYWP PPDVM	NHGG FHIQCSQSEDCTIAYVSMVLV							NTQTGEEHTV
Dici_PTP1	ENCRIKCD	RYWPEQIGGEQFSYGNNGNEVFGTYSVELVEVIQCREIITRNIR								LTFEGETRDI
Fiss_yeast_pyp1	EAGREMCT	AYWPSNGIGDK	QYGDYCVKQISEENVDSRFLFEIQ							NANFSPVKKV
Fiss_yeast_pyp2	EAGSEKCS	QYWPDKHALCLEGG	LRISVOKYETFEFLKVLHFL							DKPNGPPKYI
Hum_PTP_xi_D2	EKGRRKCD	QYWP ADGSE	EYGN FLVTQKSVQVLAITYTFLRNTKIKKG							SQKGRPSGRVV
Hum_LCA_D2	EMGREKCH	QYWP AERSA	RYQY FVVDPMAYENMPQYILFKVT							DARDGQSRTI
Hum_PTP_alpha_D2	ERGQEKCA	QYWP SDGLV	SYGD ITVELKKEECESYTVLLVT							NTRENKSRQI
Hum_PTP_opsilon_D2	EREQDKCY	QYWP TEGSV	THGE ITIEIKNDTLSEASISIFLVTNLQPO							ARQEEQVRVV
Hum_PTP_mu_D2	PA QLCF	QYWP ENGVS	RHGP IQVEFVSADLEEDIISFRINA							ARPQDGYRMV
Mouse_CD45_D2	NGDQEVCA	QYW GEGKQ	TYGD MEVEMKDTNRASAYTLFELR							HSKRKEPRTV
Dros_PTP69A_D2	D GPRKCP	RYWA DDEVQ	YDH ILVKYVHSESCPYTFFVVT							NCKIDDTLKV
Hum_PTP_zeia_D2	NMAEDEFV	YWPNKDEPINCESFKVTLMAEEHKCLSNEEKLIIFILE								ATQDDYVLEV
Hum_PTP_gamma_D2	SLAEDEFV	YWPRESMNCFAFTVTLISKDRCLCSNEEQIIFILE								ATQDDYVLEV
Dros_PTP99A_D2	D INFA	QFWPDEATPIESDH	RVKELNKTNSDYVSFVIO							SIQDDYELTV
Yarsinia_PTP	ELANORFGMPDYFR	QSGT YGSITVESKMTQOVGLGGINMYTLTI								REAGOKTISV
PTP1Bseq.no.	120	130	140	150	160					

PTP1B66

Fig. 1C

β5

β6

β7

β8

FIG. 1D

	210	220	230	240	250	260	270
Hum_PTP1B	LHFHYTTWPDF	G	VPESPASFLN	FLFKVRES	GSLSP	PEHG	PVVVHCSAGIGRS
Hum_TCPTP	SHFHYTTWPDF	G	VPESPASFLN	FLFKVRES	GSLNP	PDHG	PAVIHCSAGIGRS
Hum_PTP_xi_D1	TQYHYTTQWPDF	G	VPEYSLPVL	TFRKAAYA	KRH	AVG	PVVVHCSAGVGR
Hum_PTP_zeta_D1	TQYHYTTQWPDF	G	VPEYSLPVL	TFRKAAYA	KRH	AVG	PVVVHCSAGVGR
Hum_PTP_gamma_D	IQYHYTTQWPDF	G	VPEYALPVL	TFRSSAA	RMP	ETG	PVLVHCSAGVGR
Dros_PTP99A_D1	YQYHYTNWPDF	G	TPDHPLPVL	NFVKSSAA	NPA	EAG	PIVVHCSAGVGR
Hum_LCA_D1	RQFQFMAWPDF	G	VPEYTPILA	FLRRVKAC	NPL	DAG	PMVVHCSAGVGR
Hum_PTP_mu_D1	RQFHFMTGPDF	G	VPYHATGL	GFVRQVSK	SPP	SAG	PLVVHCSAGVGR
Hum_PTP_alpha_D1	TQFHFMTGPDF	G	VPFTPIGML	KFLKKVKAC	NPQ	YAG	AIVVHCSAGVGR
Hum_PTP_opsilon_D	SQLHFTSWPDF	G	VPFTPIGML	KFLKKVKTL	NPV	HAG	PIVVHCSAGVGR
Mouso_CD45_D1	THIQFTSWPDF	G	VPEDPHLL	KLRRRVNAF	SNF	FSG	PIVVHCSAGVGR
Hum_SH_PTP1	WQYHFRTPDF	G	VPSPDGGV	LDLEEHHK	QES	IMDAG	PIVVHCSAGVGR
Hum_SH_PTP2	WHYQYLSWPDF	G	VPSEPGVLS	FLDQINQR	QES	IPHAG	PIIVHCSAGVGR
Hum_PTP_bola	RHFHYTVWPDF	G	VPETTSQSL	IQFVRTVRDY	INRS	PGAG	PTVVHCSAGVGR
Dros_PTP10D	RHFHTTWPDF	G	VPNPQT	LVRFVRAFRDR	ICA	EQR	PIVVHCSAGVGR
Hum_SAP.1	RQFHYQAWPDF	G	VPSSPDTLL	AFWRMLRQW	LDQT	MEGG	PPIVHCSAGVGR
Ral_PTP_STEP	KHYWFTSWPDF	K	TPDRAPPL	HLHVRVEEAA	QQEG	PHCS	PIIVHCSAGVGR
Dros_PTP69A_D1	TQYHYLTWKDF	M	APHPHGI	IKFIRQINSVSLQ	RG		PILVHCSAGVGR
Hum_MEG2	THFQFLSWPDF	G	VPSSAASL	IDFLRVVRNQ	SLAVSNMG	ARSKGQC	PEPPIVVHCSAG
Hum_PTP.PEST	YQFHYVNWPDF	D	VPSSFDS	SILDMISLMRKYQ	EH	DV	PICIHCSAGCGR
Hum_PTPH1	THLQYVAVPDF	G	IPDDSSD	FLFVYVYSLR	VDSE		PVLVHCSAGVGR
Dici_PTP1	TQYQYEGWPDF	N	IPDHTQ	PFRLHLHSITNR	QNQI	IPSSD	RNVPIIVHCSAG
Fiss_yeast_pyp1	HHYQYPNWSDC	N	SPENVK	SMVEFLKYNVNS	HGSG		NTIVHCSAGVGR
Fiss_yeast_pyp2	HHFWVHTWDF	K	THPDIES	ITGLIRCIDK	KVPNDG		PMFVHCSAGVGR
Hum_PTP_xi_D2	TQYHYTTQWPDF	G	VPEYSLPVL	TFRKAAYA	KRH	AVG	PVVVHCSAGVGR
Hum_LCA_D2	RQFQFTDWPEQ	G	VPKTGE	FIDFVGQVHKT	KEQ	FGQDG	PITVHCSAGVGR
Hum_PTP_alpha_D2	RQFHFHGWPEV	G	IPSDGK	GMISIIAAVQKQ	QQQ	SGNH	PITVHCSAGVGR
Hum_PTP_opsilon_D2	RQFHFHGWPEI	G	IPAEKG	MIDLIAAVQKQ	QQQ	TGNH	PITVHCSAGVGR
Hum_PTP_mu_D2	QQFQFLGWPMYRD	TPVSKRS	FLKLIRQV	DKWQEEYNGGEG			PTVVHCLNGGGR
Mouse_CD45_D2	YQYQCTTWKGE	E	LPAEPK	DLVSMIQDLKQ	KLPKAS	PEGMKYH	KHASILVHCRDg
Dros_PTP69A_D2	TQFQYNGWPTVD	GEVPEV	CRGIIELVD	QAYNHYNKNN	KNSGC		RSPLTVHCSLg
Hum_PTP_zeia_D2	RHFQCPKWPVN	PDSPISK	TFELISVIKEE	AANR	DG		PMIVHDEHG
Hum_PTP_gamma_D2	RHFQCPKWPVN	PDAPIS	STFELINVIKEE	ALTR	DG		PTIVHDEYg
Dros_PTP99A_D2	KMLHCPSPWEM	SNPNSI	YDFIVDVHER	CNDY	RNG		PIVIVDRIg
Yarsinia_PTP	PVVHVGNWPD	OTAVSSE	VTKALASL	VDOTAE	TKRNMYE	SKGSSA	VADDSKLRPVI
PTP1Bseq.no.	180	190	200	210	220		

PTP1B66

Fig. 1D



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	280	290	300	310	320	330	340
Hum_PTP1B	LADTCLLLMDKR	KDPSSVDI	KKVLLLEMRKFRMG	LIQTADQLRFSYLA	LVIEGAKFIMGD		
Hum_TCPTP	LVDTCCLVLMKEG	DD	INI	KQVLLNMRKYRMG	LIQTPDQLRFSYMAI	IEGAKCI	KGDSS
Hum_PTP_xi_D1	VLDLMLQQIQHE	GT	VNI	FGFLKHIRSQRNY	LVQTEEQYVFIHDTL	VEAAILSKETEV	
Hum_PTP_zeia_D1	VLDLMLQQIQHE	GT	VNI	FGFLKHIRSQRNY	LVQTEEQYVFIHDTL	VEAAILSKETEV	
Hum_PTP_gamma_D	VLDLMLQQIKDK	ST	VNV	LGFLKHIRTQRNY	LVQTEEQYIFIHDALE	AILGKETEV	
Dros_PTP99A_D1	VLDAMLKQIQK	NI	VNV	FGFLRHIRARQNF	LVQTEEQYIFLHDALE	VEAIASETNL	
Hum_LCA_D1	VLDAMLERMKHE	KT	VDI	YGHVTCMRSQRNY	MVQTEEQYVFIHEAL	EAATCGHTEV	
Hum_PTP_mu_D1	VIDIMLDMAERE	GV	VDI	YNCVRELRSRRVN	MVQTEEQYVFIHDAI	LEACLCGDTSV	
Hum_PTP_alpha_D1	VIDAMLDMMHTE	RK	VDV	YGFVSRIARQRCQ	MVQTEEQYVFIYQAL	LEHYLYGDTL	
Hum_PTP_opsilon_D	VIDAMLMAMHAE	QK	VDV	YGFVSRIARQRCQ	MVQTEEQYVFIYQAL	LEHYLYGDTL	
Mouso_CD45_D1	VIDAMLEGLAE	GK	VDV	YGFVVKLRRQRCL	MVQTEEQYVFIYQAL	VEYNOFGETEV	
Hum_SH.PTP2	VIDILIDIIREK	GL	VDV	PKTIQMVRSQRSG	MVQTEAQYRFIYMAV	QHYIETLQRR	
Hum_SH.PTP1	VIDMLMENISTK	GL	VDI	KTIQMVRAQRSG	MVQTEAQYRFIYVAI	AQFIETTKKL	
Hum_PTP_bola	ALDRILQQLDSK	DS	VDI	YGAVDLRLHRVH	MVQTECQYVYLHQ	CVDRDLRARKLRS	
Dros_PTP10D	TLDRILQQINTS	DY	VDI	FGIVYAMRKERVW	MVQTEQYICIHQCL	LAVLEGKENIVGP	
Hum_SAP.1	ALDVLLRQLQSE	GL	LGP	FSFVRKMRERPL	MVQTEAQYVFLHQ	CICGSSNSQPRPQR	
Ral_PTP_STEP	ATSIQCQLRRE	GV	VDI	LKTTCCQLRDRGG	MIQTECQYQFVHH	AMSLY	
Dros_PTP69A_D1	ALDSLIIQLEEE	DS	VSI	YNTVCDLHQHNF	LVQSLKQYIFLYR	ALLDTGTFGNTDI	
Hum_MEG2	SLDICALQLEEL	GT	LNQ	FQTVSRMRTQRAF	SIQTEPQYVFCYK	AILEFA	
Hum_PTP.PEST	AIDYTNLLKAG	KIPEEFNV	FNLIQEMRTQRHS	AVQTEQYELVHRAI	QAQLFEKQLQLY		
Hum_PTPH1	TMETAMCLTERN	LP	IYP	LDIVRKMRDQRAM	MVQTESSQYKFVCE	AILRVY	
Dici_PTP1	TAVIMMKKLDHYFK	QLDYNSRIDFNL	FSIVLKLREQRPG	MVQTEQYELFCYK	TILDEIYHRLNC		
Fiss_yeast_pyp1	VLDTILRFPESKLSG	FNPVSADSSDVFL	VDHIRKQRMK	MVQTEQYELFCYK	TILDEIYHRLNC		
Fiss_yeast_pyp2	AVDQILOVPKNILPK	TNLEDSKDFIENC	VNSLRSORMK	MVQTEQYELFCYK	TILDEIYHRLNC		
Hum_PTP_xi_D2	VLDLMLQQIQHE	GT	VNI	FGFLKHIRSQRNY	LVQTEEQYVFIHDTL	VEAAILSKETEV	
Hum_LCA_D2	TLISIVLERMYE	GV	VDM	FQTVKTLRTQRP	MVQTEQYQLCYRA	ALEYL	
Hum_PTP_alpha_D2	ALSTVLERVKAE	GI	LDV	FQTVKSLRLQRP	MVQTEQYELFCYK	VQVEYI	
Hum_PTP_opsilon_D2	ALSNILERVKAE	GL	LDV	FQAVKSLRLQRP	MVQTEQYELFCYK	VQVQDFI	
Hum_PTP_mu_D2	AISIVCEMLRHQ	RT	VDV	FHAVKTLRNNKPN	MVDLLDQYKFCY	EALEYLNSG	
Mouse_CD45_D2	ALFNLLSAETE	DV	VDV	FQVVKSLRKARPG	VVCSYEQYQFLYD	IIASIPQNGQV	
Dros_PTP69A_D2	AMCIVLQHLRLE	KC	VDI	CATTRKLSQRTG	LINSYAQYELFHR	AINY	
Hum_PTP_zeia_D2	ALTTLMHQLEKE	NS	VDV	YQVAKMINLMRPG	VFADIEQYQFLYK	VILSLVSTRQEN	
Hum_PTP_gamma_D2	ALTTLHQLENE	NA	VDV	FQVAKMINLMRPG	VFADIEQYQFLYK	VILSLVSTRQEN	
Dros_PTP99A_D2	AISSLAIEMEYC	ST	ANV	YQYAKLYHNKRP	PG VNTSSEDIRVI	YN ILSELPGNLNLKR	
Yarsinia_PTP	GAMCMNDSRNSQ	LSV	EDMVSOMRVORNG	MVOKDEOLDVLIK	LAE		
PTP1Bseq.no.	230	240	250	260	270	280	

Fig. 1E

PTP1B66

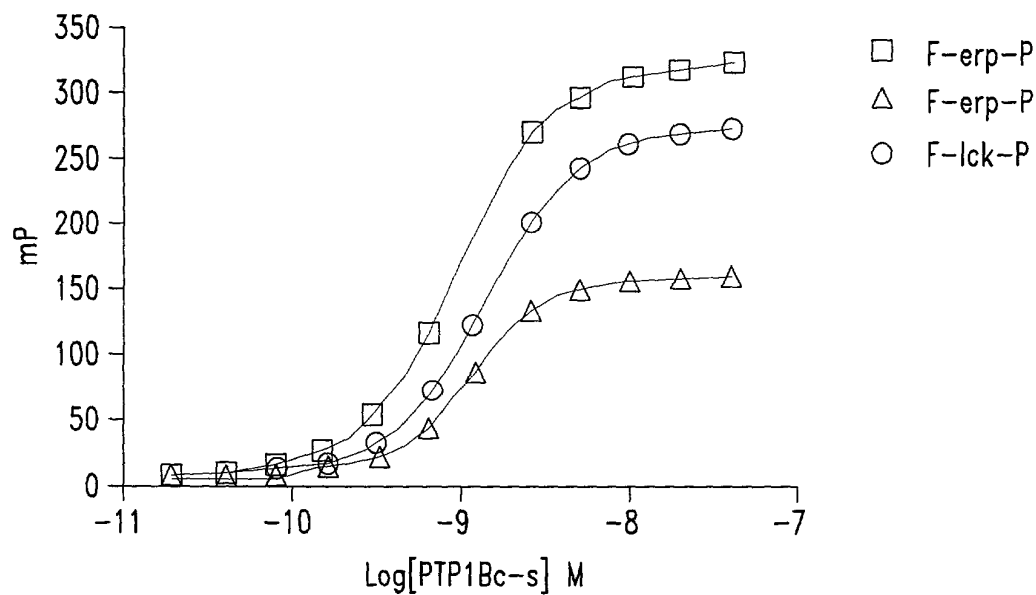


Fig. 2

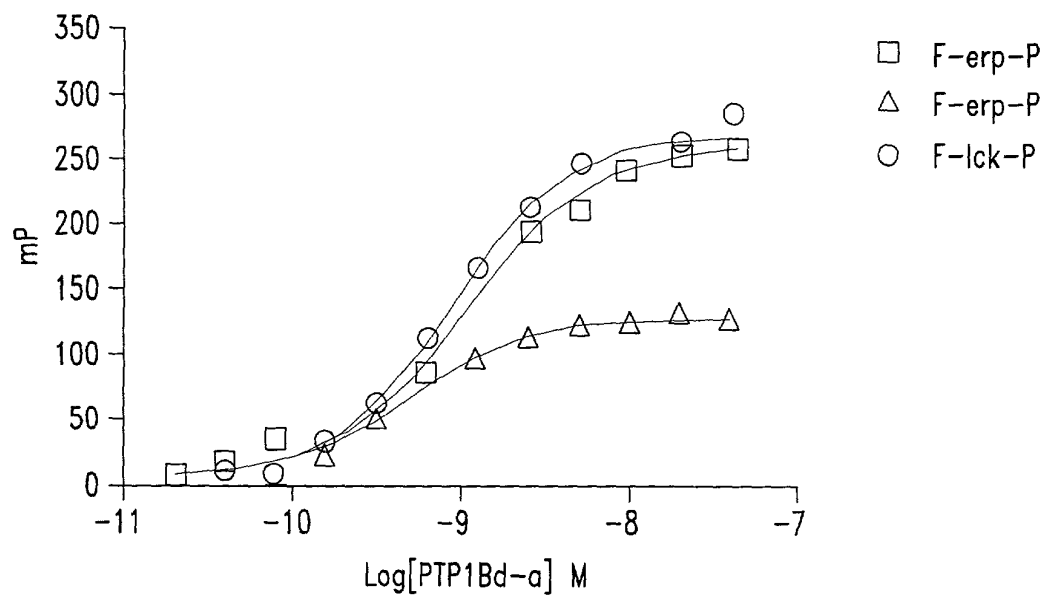


Fig. 3

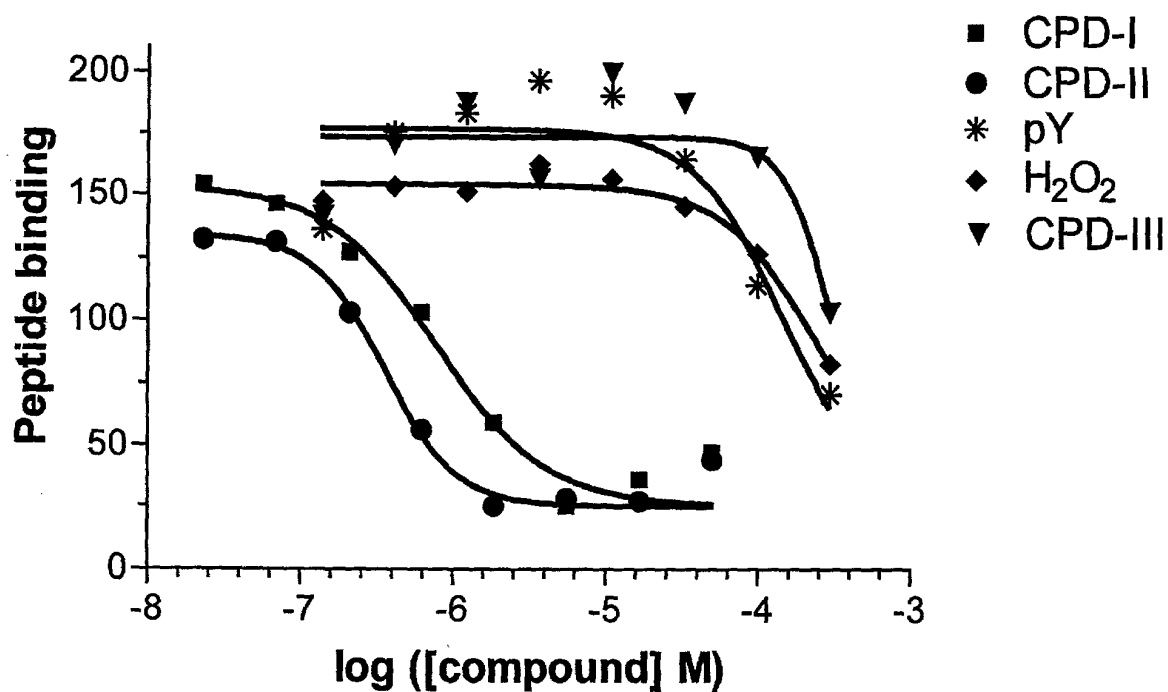


Fig. 4A

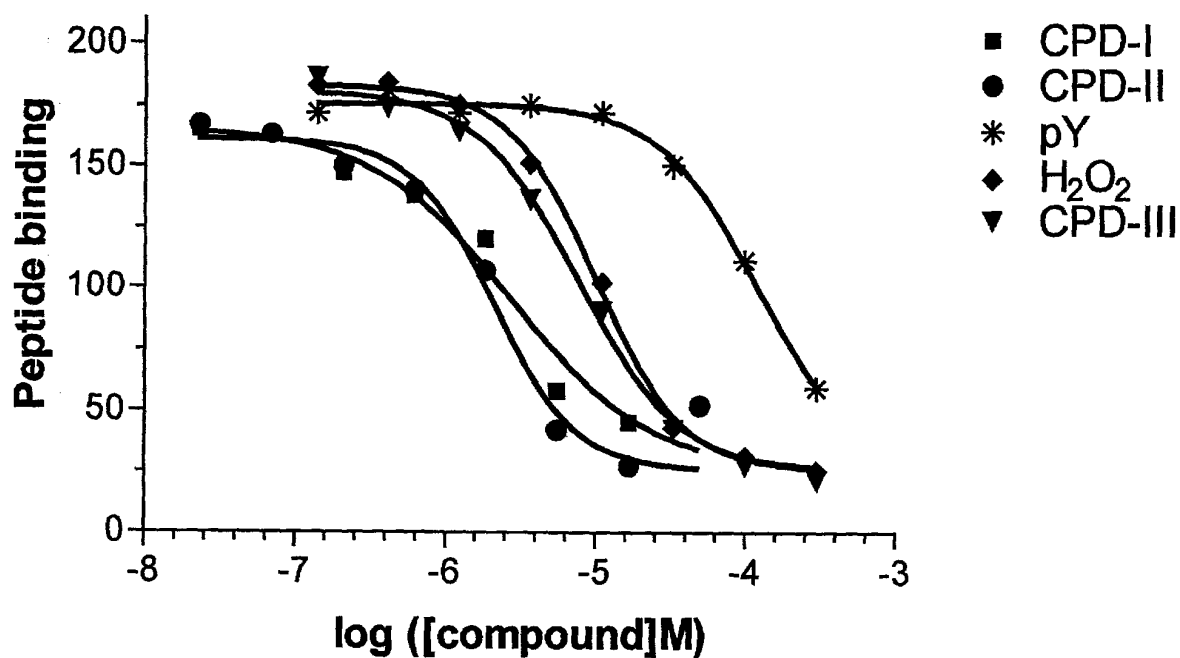


Fig. 4B

Binding of P-ERP: ERP mixture with G104

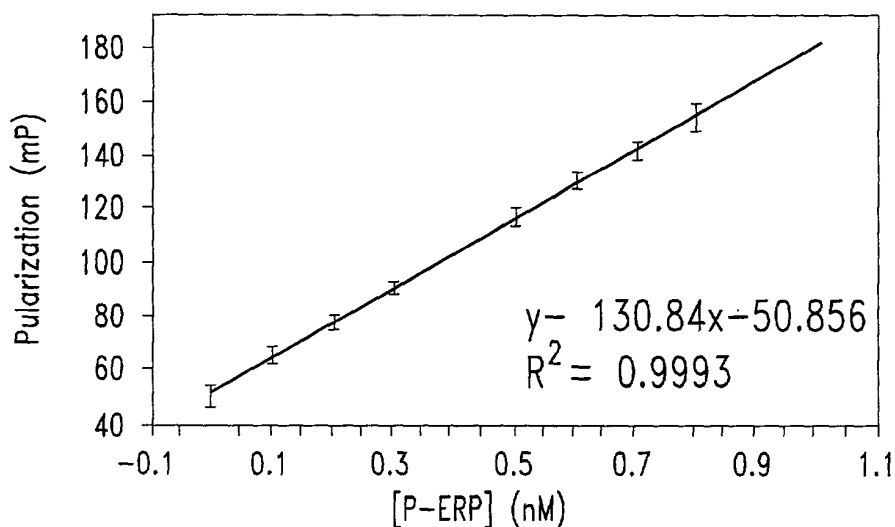


Fig. 5

Dephosphorylation of F-P-ERP
 with different amounts of PTP1B

- 0.67ng Ptp 1B
- △ 0.33ng Ptp 1B
- ▽ 0.17ng Ptp 1B
- 0.083ng Ptp 1B

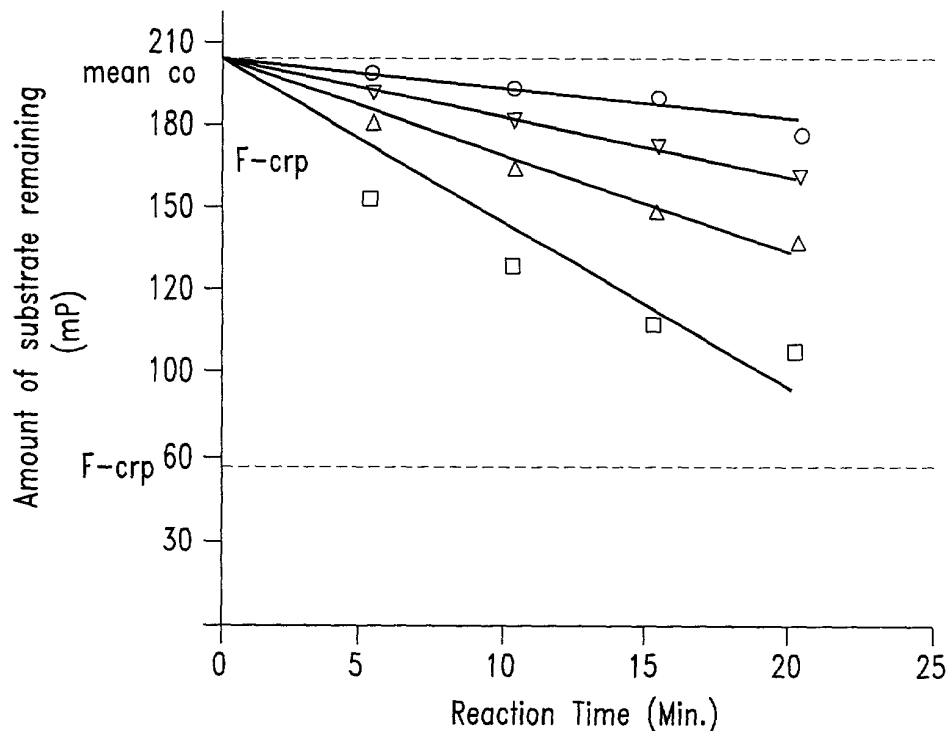


Fig. 6

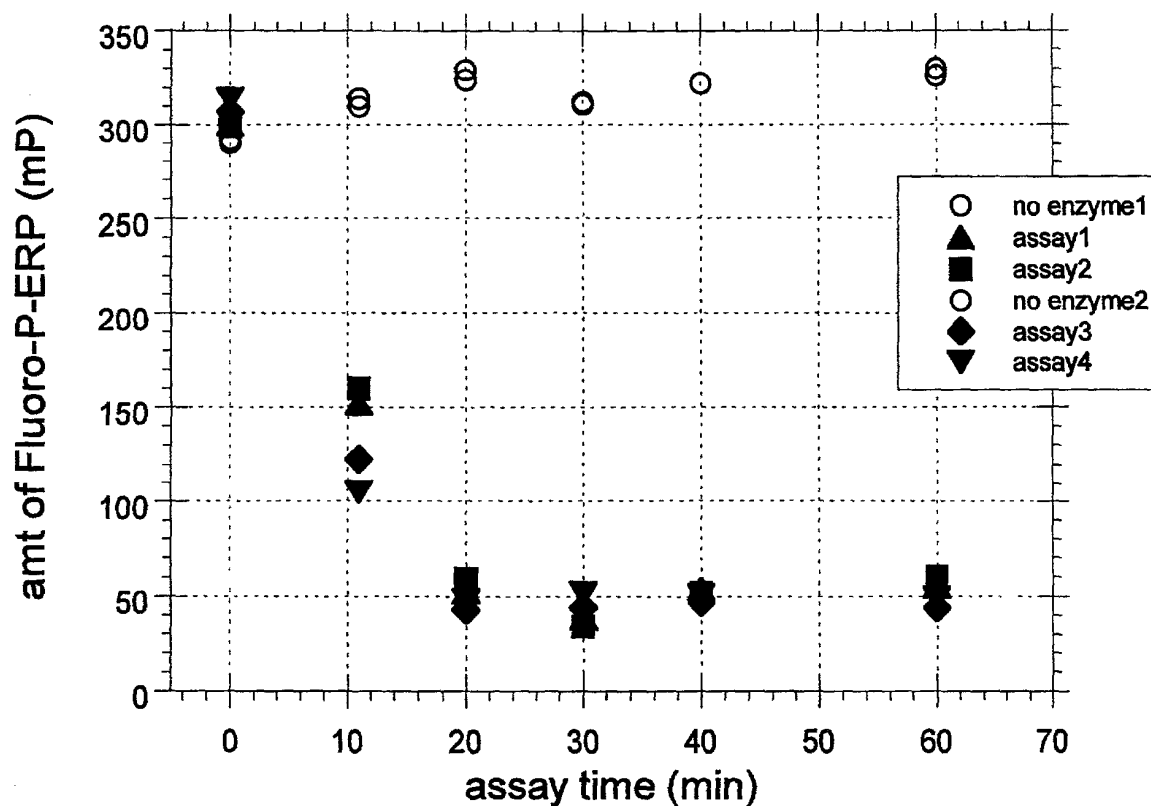


Fig. 7A

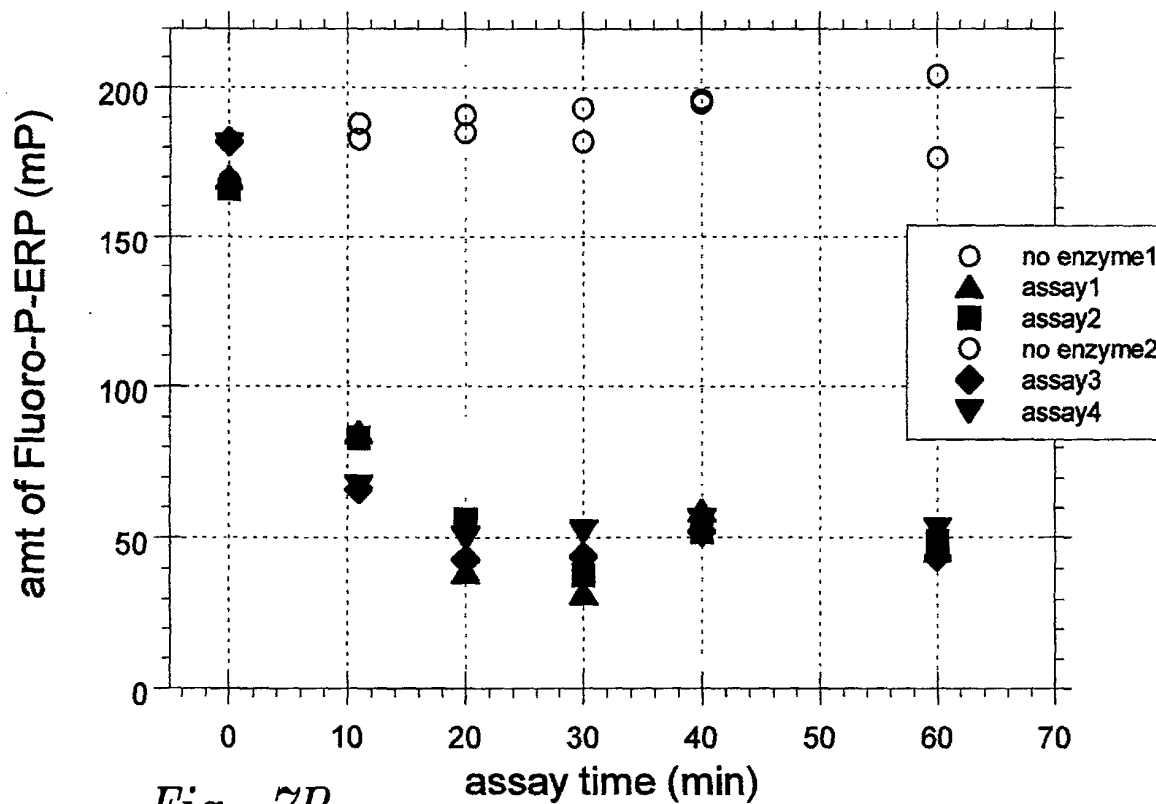


Fig. 7B

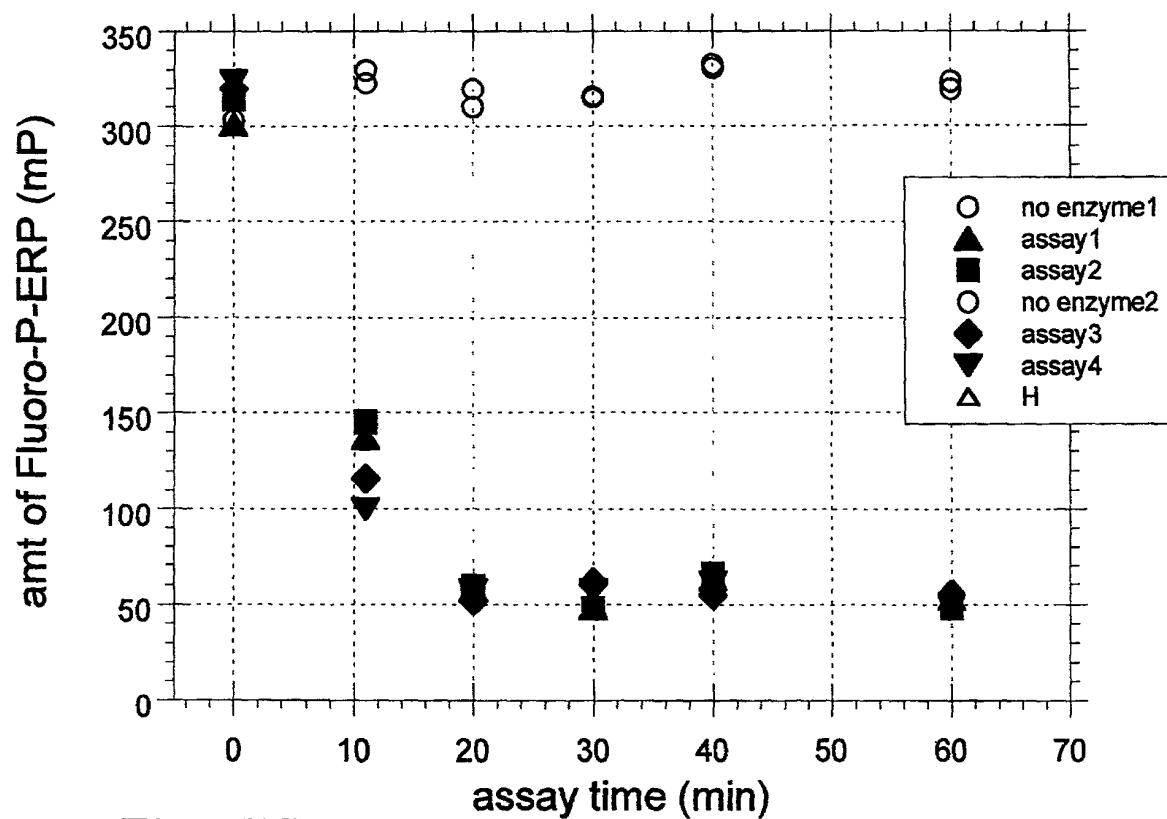


Fig. 7C

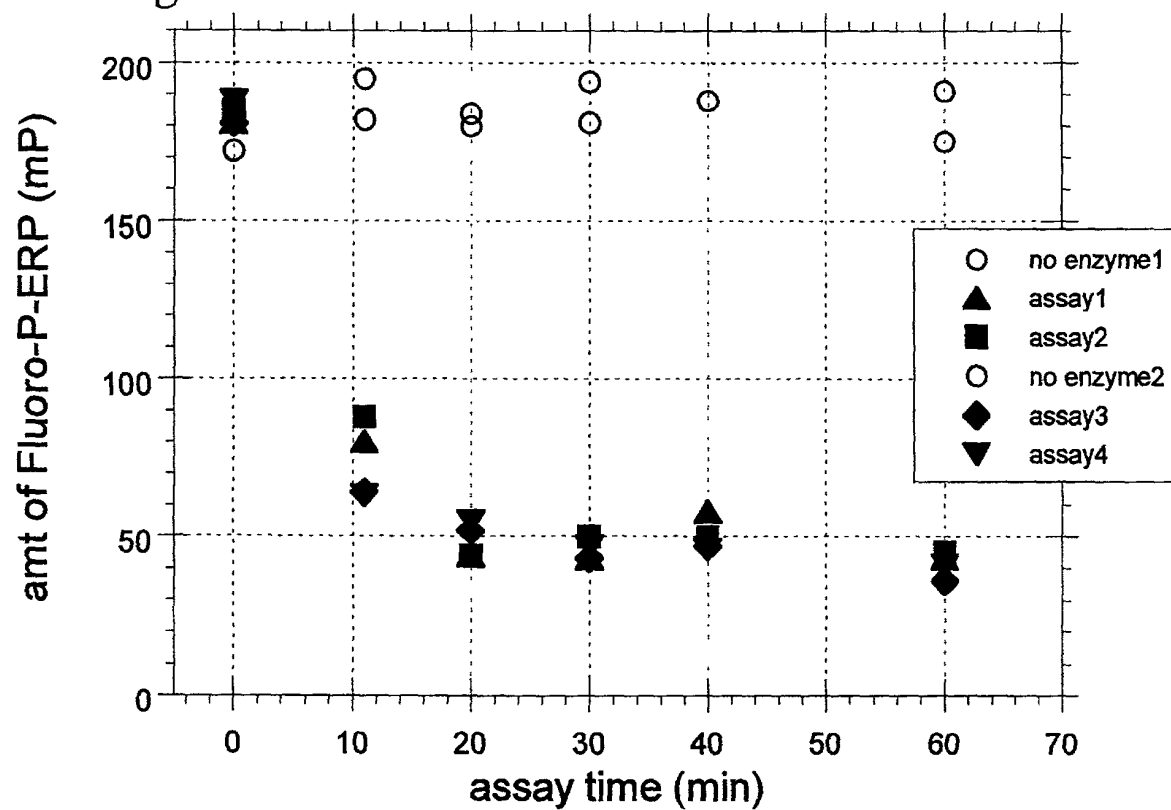


Fig. 7D

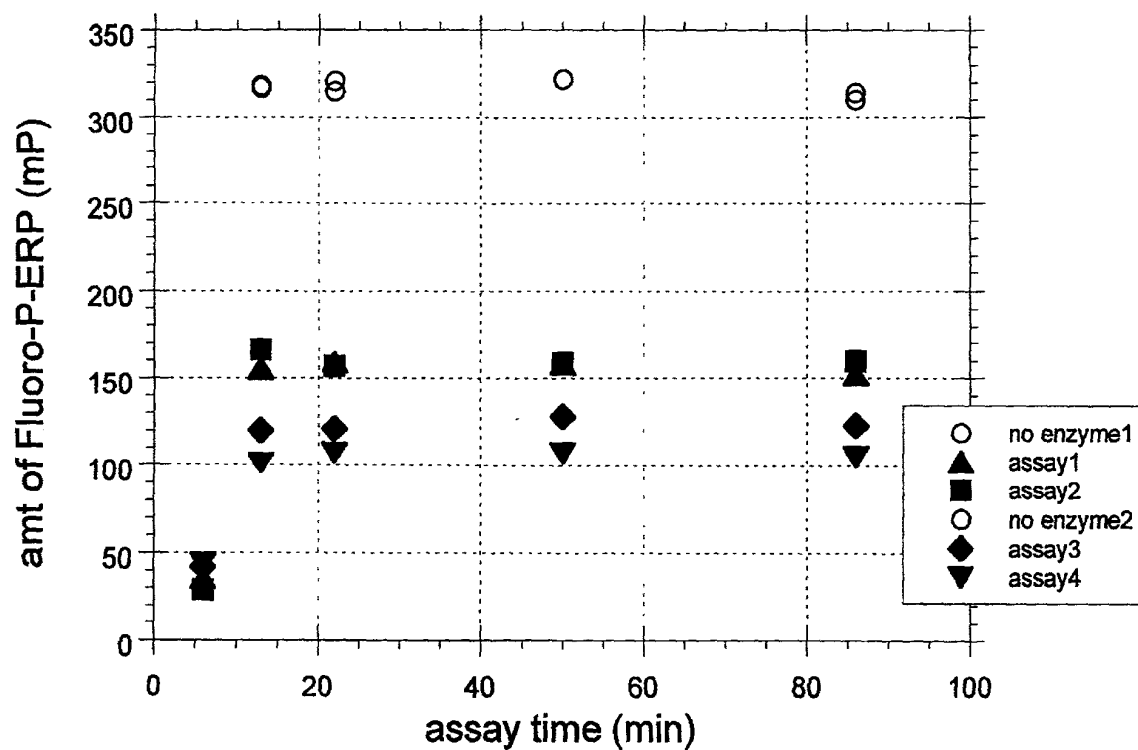


Fig. 8A

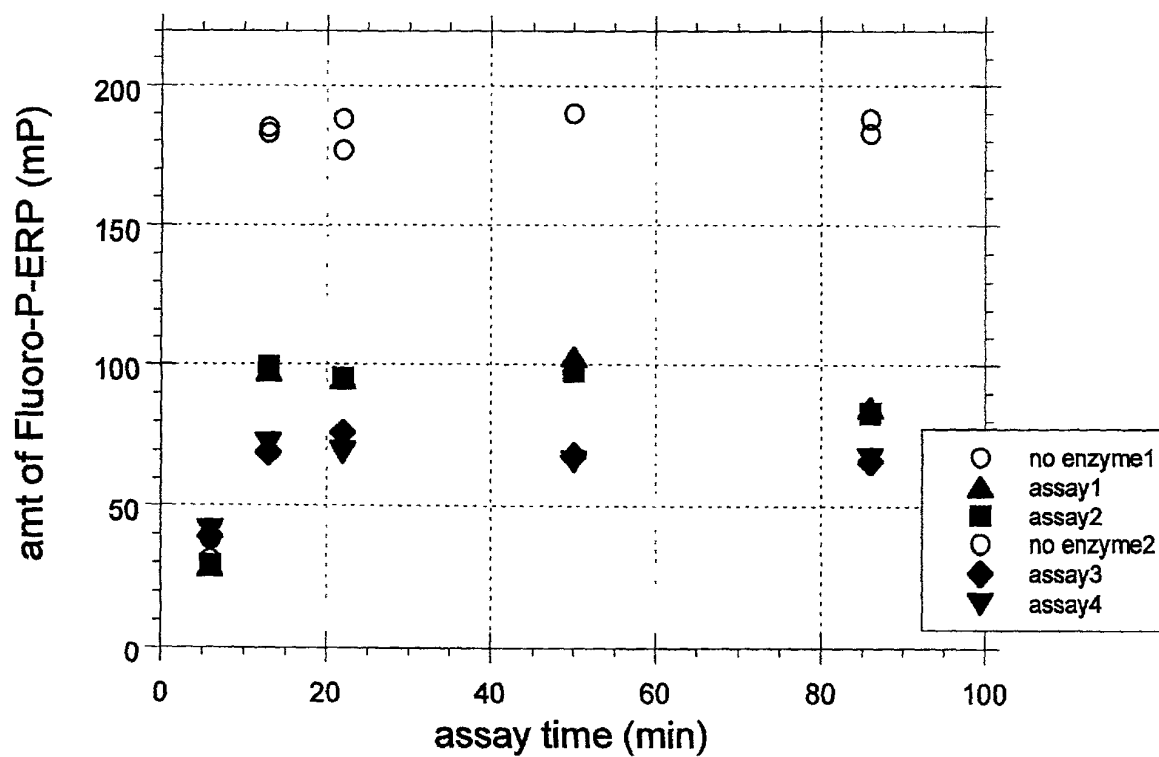


Fig. 8B

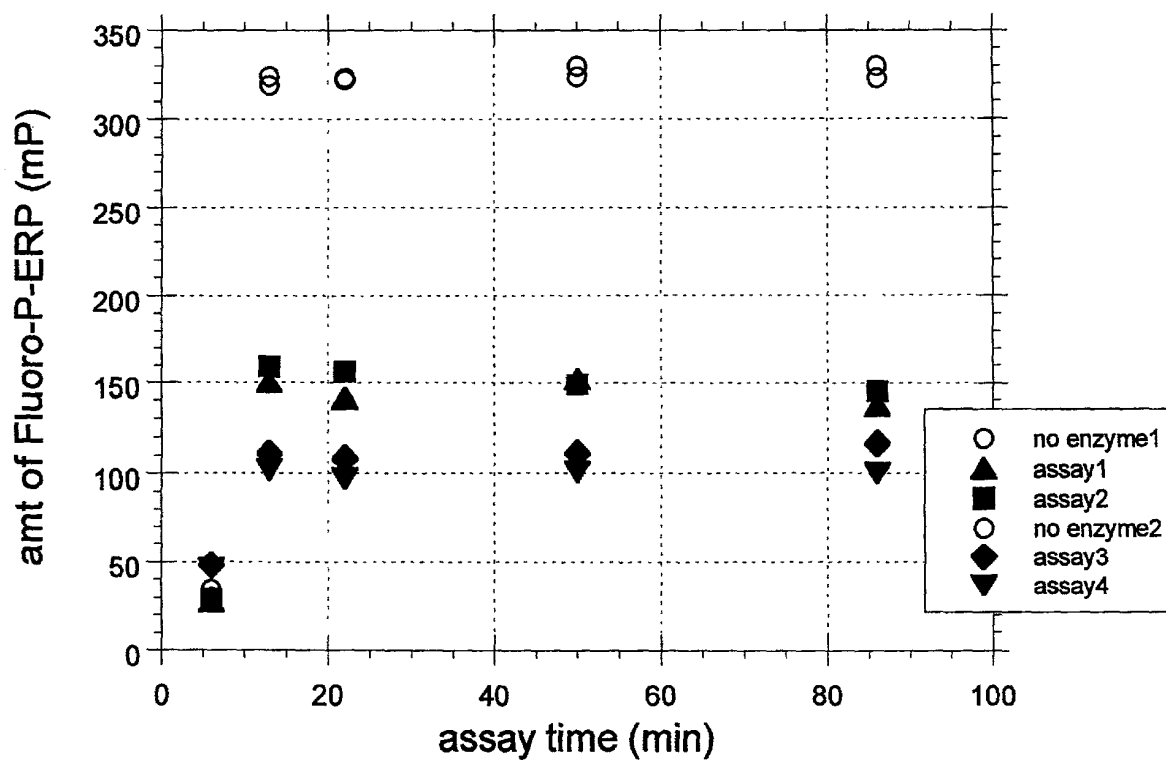


Fig. 8C

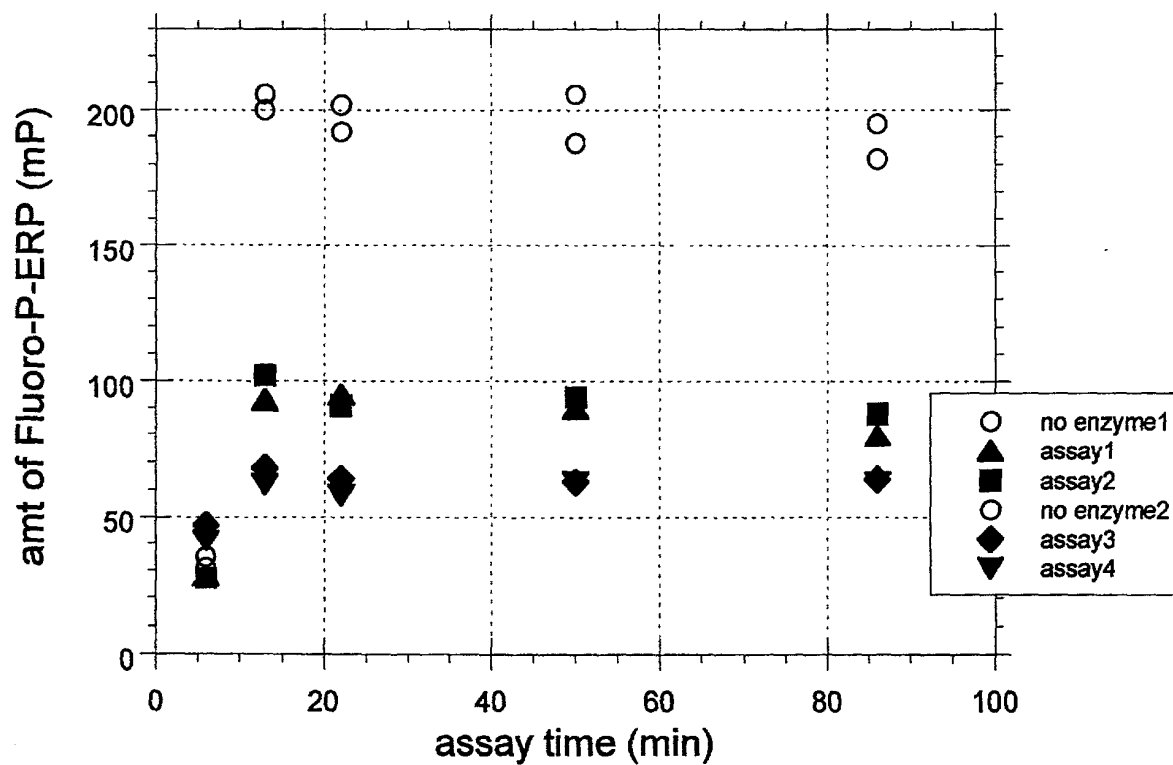


Fig. 8D

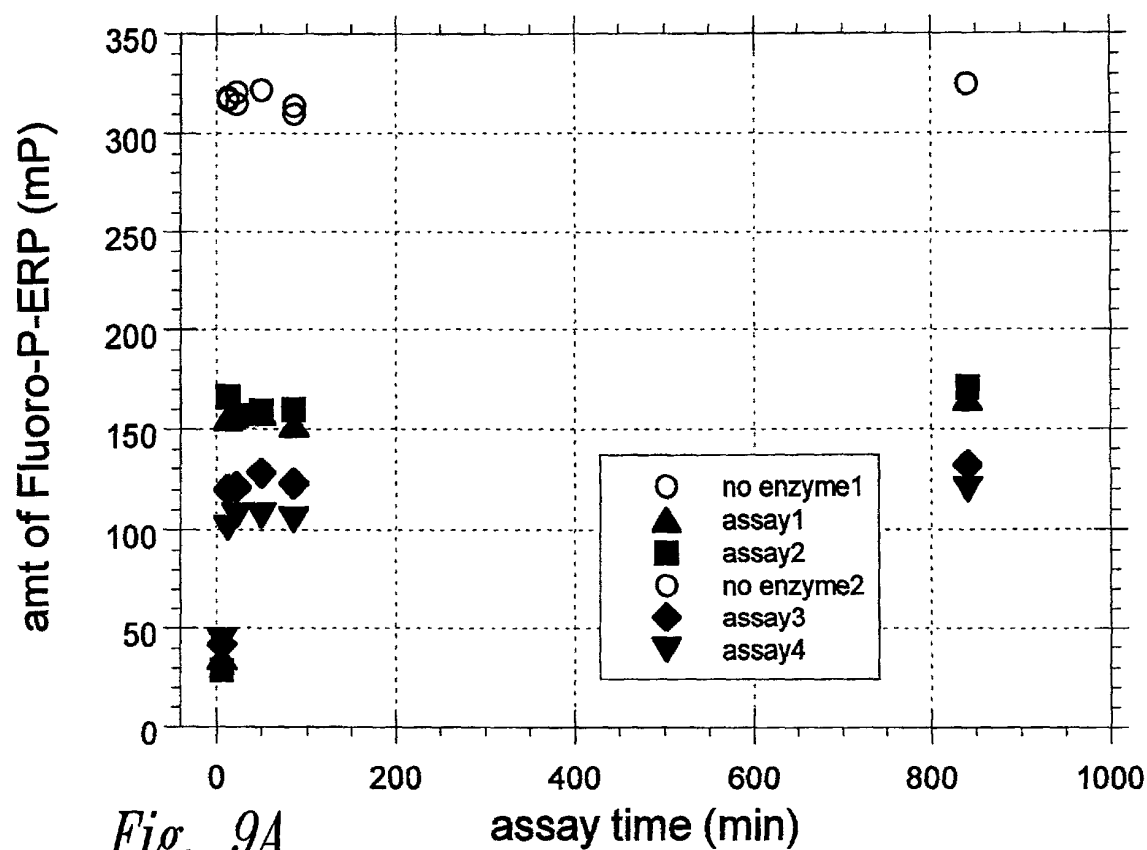


Fig. 9A

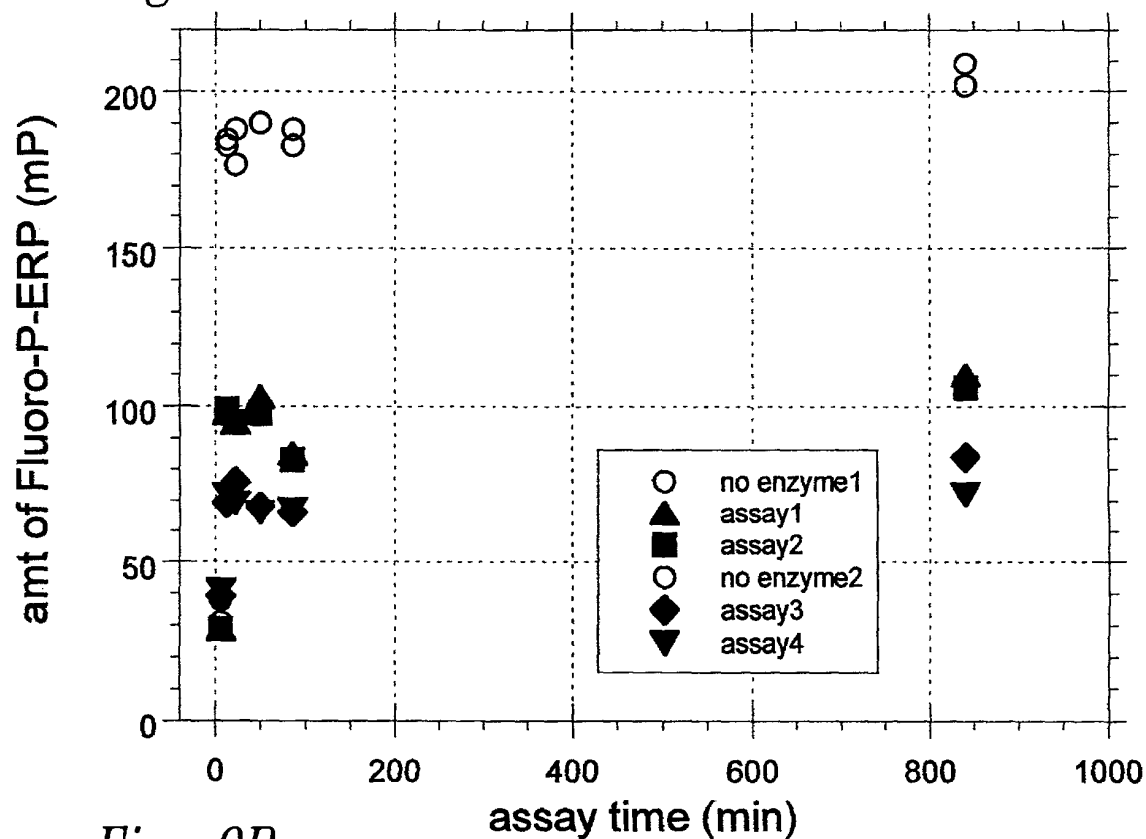
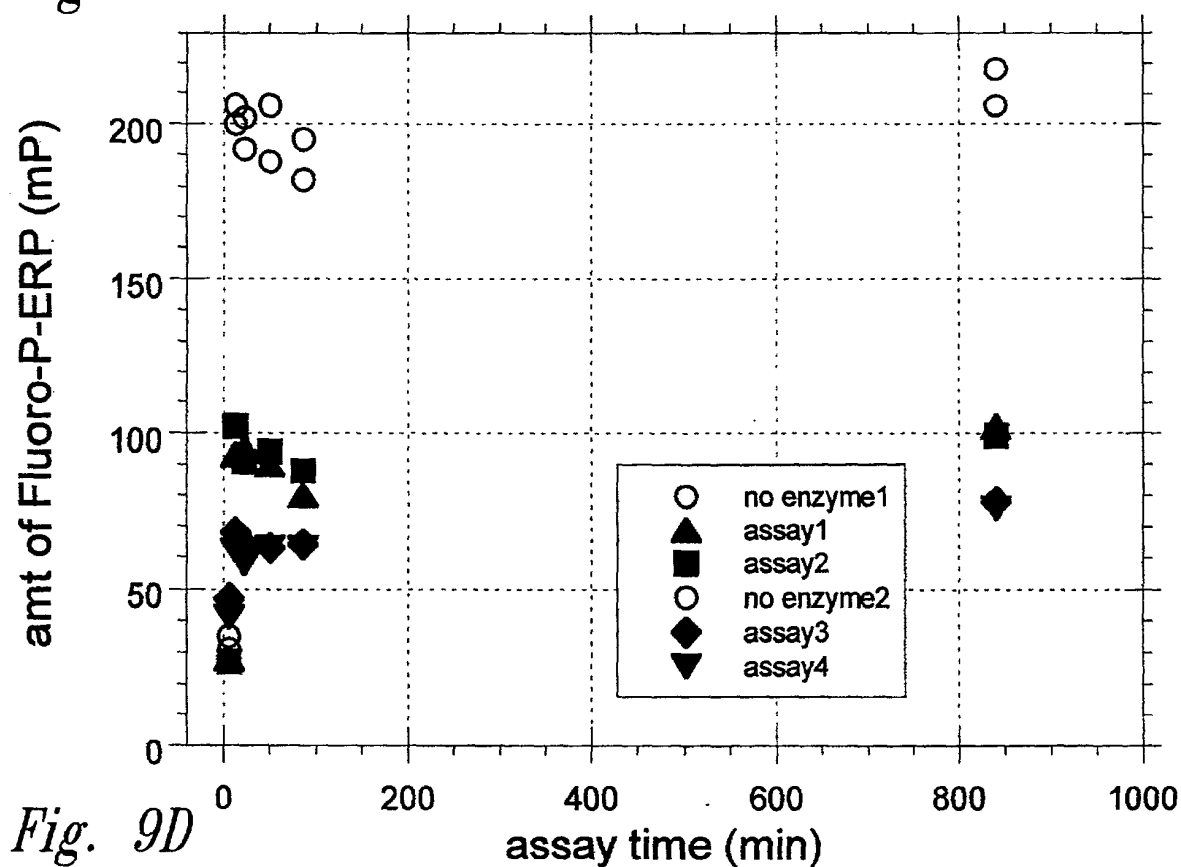
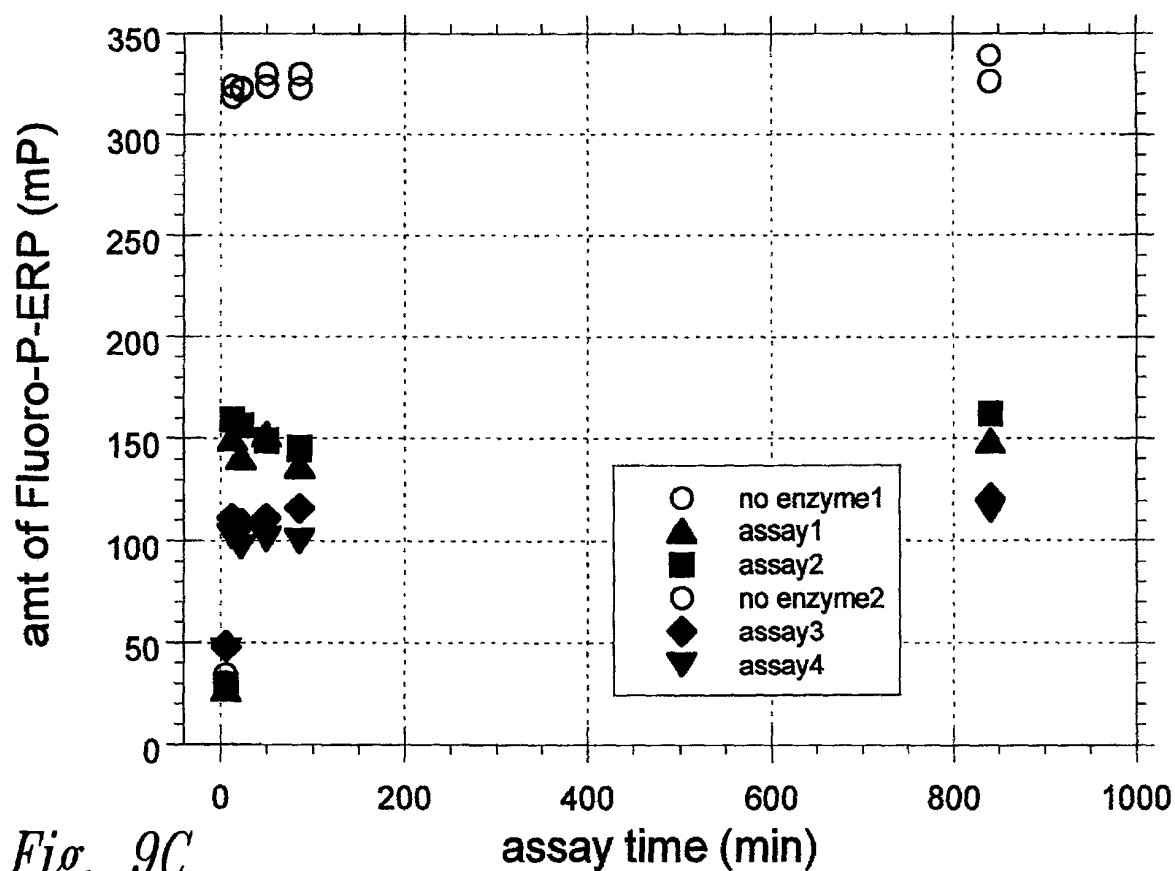


Fig. 9B



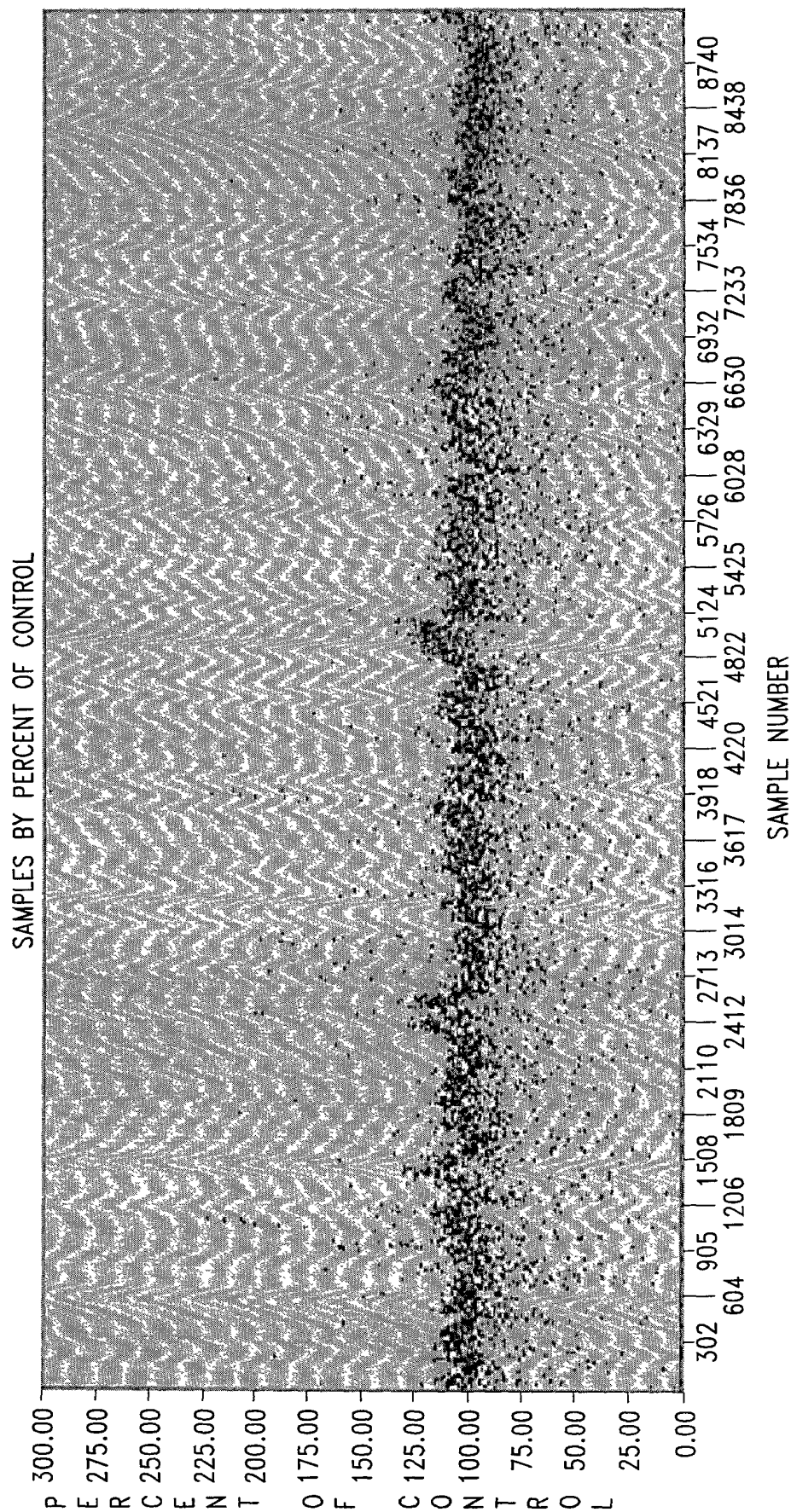


Fig. 10A

105090 92933660

SAMPLES BY PERCENT OF CONTROL

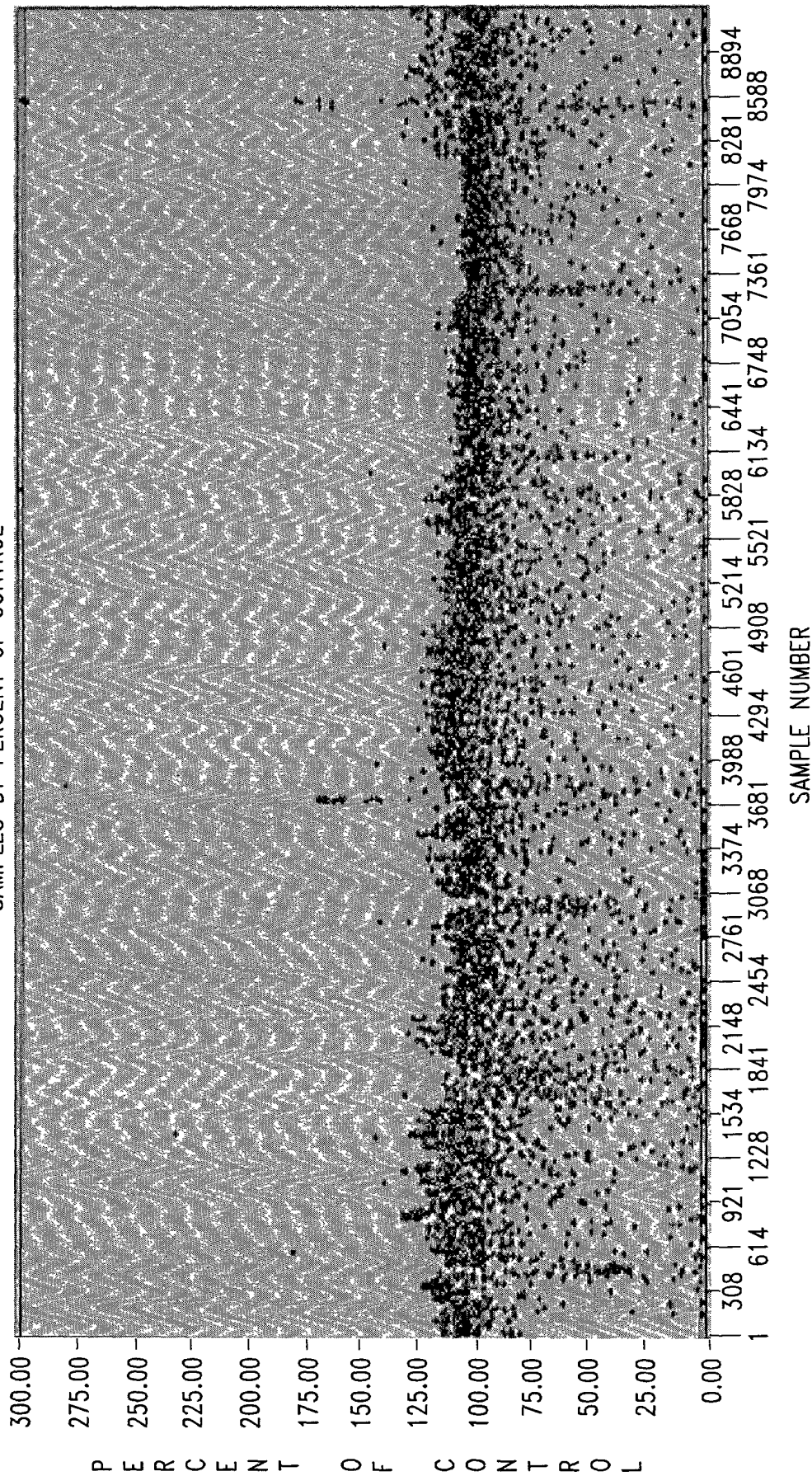


Fig. 10B